



# Fishfinder 250/250C

# *high-resolution sonar owner's manual*



(Fishfinder 250C shown)

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## INTRODUCTION

Thank you for choosing the Garmin® Fishfinder 250/250C. This product is designed for easy operation and to provide years of reliable service.

Operations for the Fishfinder 250 and Fishfinder 250C are the same unless otherwise noted. To ensure that you get the most from the Fishfinder 250/250C, take time to read this *Owner's Manual* and learn how to operate your new unit. This manual breaks down into three main sections. Getting Started covers the installation and testing for the Fishfinder 250/250C. Basic Operation provides detailed references to the features and operations of the Fishfinder 250/250C and a basic overview of how sonar works and provides information on interpreting sonar graphs. The Appendix contains unit specifications and warranty information.

## Product Support

If you encounter a problem or just have a question, our Product Support Department can be reached Monday-Friday, 8 AM-5 PM Central Time.

Phone: 800/800.1020 or 913/397.8200

Online: <http://www.garmin.com/contactUs/techSupport.jsp>

Check the Garmin Web site ([www.garmin.com](http://www.garmin.com)) for links to Product Support and Product FAQs.

*Fishfinder 250/250C Owner's Manual*

Enjoy your new Fishfinder 250/250C, and once again thank you for choosing Garmin!

## Product Registration

**Help us to better support you by completing our online registration today!** Connect to our Web site ([www.garmin.com](http://www.garmin.com)) and look for the Product Registration link on the Home page. Your unit's serial number is located on the back of the unit.

Use this area to record the serial number in case your Fishfinder 250/250C is lost, stolen, or in need of service. Be sure to keep your original sales receipt in a safe place or attach a photocopy to these instructions.

Serial Number: \_\_\_\_\_



**NOTE:** If you have previously registered a Garmin product purchase, we invite you to re-register using our online system. Many services provided by our product registration system are now automated and re-registering your purchase ensures you the best possible support from Garmin.

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## GETTING STARTED

### Packing List

Before installing and using your Fishfinder 250/250C, check to see that your package includes the following items. The package part number can be found on the outside of the box. **If any parts are missing, contact your Garmin dealer immediately.**

#### Fishfinder 250 Standard Package (010-00343-00 w/o transducer):

- Fishfinder 250 Unit
- Swivel-Mount Bracket and Knobs
- Power/Data Cable
- *Owner's Manual*
- Self-Adhesive *Quick Reference Guide*
- Protective Cover
- Flush Mount Hardware Kit

#### Fishfinder 250 Optional Package (010-00343-01) includes Standard Package, plus:

- Dual Frequency (200/50kHz, 10/40°) Plastic Transom Mount Transducer with Depth and Temp

#### Fishfinder 250 Optional Package (010-00343-02) includes Standard Package, plus:

- Single Frequency (200kHz, 14°) Plastic Transom Mount Transducer with Depth and Temp

### Fishfinder 250C Standard Package (010-00341-00 w/o transducer):

- Fishfinder 250C Unit
- Swivel-Mount Bracket and Knobs
- Power/Data Cable
- *Owner's Manual*
- Self-Adhesive *Quick Reference Guide*
- Protective Cover
- Flush Mount Hardware Kit

### Fishfinder 250C Optional Package (010-00341-01) includes Standard Package, plus:

- Dual Frequency (200/50kHz, 10/40°) Plastic Transom Mount Transducer with Depth and Temp
- Separate Speed Sensor

### Fishfinder 250C Optional Package (010-00341-02) includes Standard Package, plus:

- Single Frequency (200kHz, 14°) Plastic Transom Mount Transducer with Depth and Temp
- Separate Speed Sensor

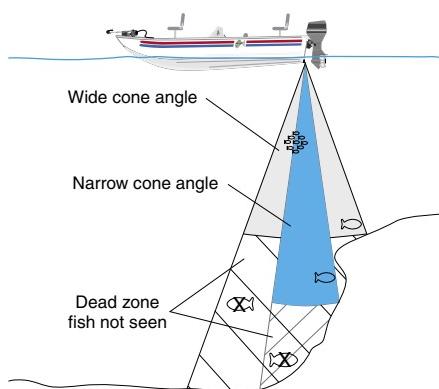


**NOTE:** For the most recent list of available accessories for your unit, current user manuals, and software updates, visit our Web site at [www.garmin.com](http://www.garmin.com).

## Transducers

The transducer acts as the eyes and ears of your sonar, transmitting sound waves toward the bottom in a cone shape. Proper transducer selection and installation are important to the operation of your unit. Select a transducer that suits the depth of the water that you are on.

A wide cone angle transducer works best in shallower water, providing a large coverage or viewing area, but at a decreased bottom resolution. In deep water this can result in a large area where fish cannot be seen. A narrow cone angle transducer is better suited to deep water installations, providing a smaller coverage or viewing area than a wide cone transducer, but with improved bottom resolution and a smaller dead zone.



## Optional Transducers

Included in the Optional Packages (page 1) are transom mount transducers and separate speed sensors. These transducers provide good all-around performance. In addition, a variety of optional transducers are available from your local dealer or direct from Garmin.

- 200/50kHz, 12/45°, plastic, transom mount, depth, temp
- 200/50kHz, 12/45°, plastic, transom mount, depth, temp, speed
- 200/50kHz, 12/45°, bronze, thru-hull mount, depth
- 200/50kHz, 12/45°, bronze, thru-hull mount, depth, temp, speed
- 200/50kHz, 12/45°, bronze, thru-hull mount/long stem, depth, temp, speed
- 200/50kHz, 12/45°, plastic, thru-hull mount, depth
- 200/50kHz, 12/45°, plastic, adjustable, in-hull mount
- 200kHz, 14°, plastic, transom mount, depth
- 200kHz, 14°, plastic, transom mount, depth, temp
- 200kHz, 14°, plastic, transom mount, depth, temp, speed
- 200kHz, 8°, plastic, transom mount, depth, temp
- 200kHz, 8°, plastic, transom mount, depth, temp, speed
- 200kHz, 12°, bronze, thru-hull mount, depth
- 200kHz, 12°, bronze, thru-hull mount, depth, temp
- 200kHz, 9°, bronze, thru-hull mount, depth, temp, speed
- 200kHz, 12°, plastic, thru-hull mount, depth
- 200kHz, 12°, plastic, thru-hull mount, depth, temp
- 200kHz, 14°, plastic, in-hull mount, depth
- 200kHz, 14°, plastic, trolling motor mount, depth, temp

## Installation

The Fishfinder 250/250C must be properly installed according to the following instructions to get the best possible performance. To complete the installation, you need the appropriate fasteners and tools. Verify that all cables can reach the unit mounting location, and take time to read through these instructions prior to installation. Be sure to always wear safety goggles and a dust mask when drilling, cutting, or sanding. **If you experience difficulty installing the unit, contact Garmin Product Support or seek the assistance of a professional installer.**

## Selecting a Proper Location

Choose a location that provides optimal viewing as you operate the vessel and allows easy access to the unit's keypad. Select a mounting surface capable of supporting the weight of the unit and protecting it from excessive vibration and shock. DO NOT mount the unit in an area exposed to extreme temperature conditions. When installing the mounting bracket, allow room for the routing and connection of the power and transducer cables.

## Installing the Swivel Mount

The Fishfinder 250/250C's compact, waterproof case is suitable for mounting in exposed locations or at the nav station. The unit comes with a swivel-mount bracket that can be used for console or overhead mounting.

When choosing a location for the unit, consider the following conditions:

- There should be at least a 3" (8 cm) clearance behind the case to allow connection of the transducer and power/data cables.
- The mounting surface should be sturdy enough to support the unit and protect it from excessive vibration and shock.



***NOTE:** The temperature range for the Fishfinder 250/250C is 5°F to 130°F (-15°C to 55°C). Extended exposure to temperatures outside this range (in storage or operating conditions) may cause failure of the LCD screen. This type of failure and related consequences are NOT covered by the manufacturer's limited warranty.*

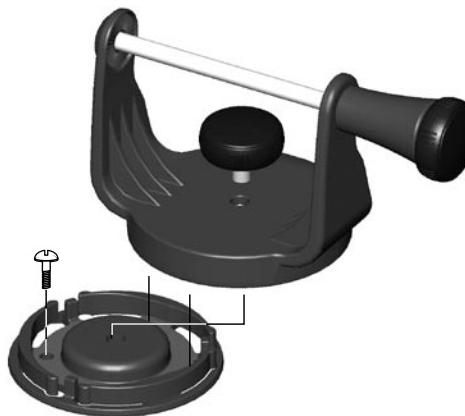
## To install the swivel-mount bracket:

**Tools (not included)**—Drill, screwdriver (Phillips or standard), and either of the following:

- Three #8 (4mm) pan head machine bolts with matching nuts and washers and a 5/32" (5mm) drill bit.
  - Three #8 pan head self-tapping screws and an appropriately-sized drill bit for drilling starter holes.
1. Using the swivel base as a template, mark the location of the three holes that are used to secure the bracket to the mounting surface.
  2. Drill the mounting holes.
    - If securing the base with machine bolts, drill three 5/32" (5mm) holes at the locations you marked.
    - If securing the base with self-tapping screws, drill starter holes at the locations you marked. Starter holes should generally be no deeper than half the screw length.
  3. Secure the swivel base with three bolts or screws. DO NOT OVERTIGHTEN.
  4. Place the rest of the mount over the swivel base and secure with the short knob.



The swivel base is designed to be secured using a pan head screw or machine bolt. If you use a screw with a countersunk head, you risk damaging the mounting bracket.



Secure the base and attach the mount.

### To install the unit on the bracket

1. Align the slot on the back of the unit with the long mounting knob, and slide the unit into place. You may need to adjust the long mounting knob to spread the bracket arms apart. (Turn counter-clockwise to widen the bracket arms, clockwise to tighten.)
2. Adjust the unit angle and tighten the long mounting knob until snug.
3. To tilt the unit, loosen the long mounting knob on the right side of the bracket assembly.
4. To rotate the entire bracket, twist it left or right. The bracket clicks as you turn it.
5. Tighten all knobs once the desired viewing angle is obtained.



Slide the unit onto the bracket.



Adjust for optimal viewing.

## Flush Mounting the Fishfinder 250/250C Unit

The Fishfinder 250/250C can be flush mounted on a flat panel. When flush mounting the Fishfinder 250/250C, choose an appropriately sized location for the unit. Use the Flush Mount Template provided in the box to determine a location. Check that all cables reach the unit mounting location before beginning installation. Always wear safety goggles and a dust mask when drilling, cutting, or sanding.

### To flush mount the Fishfinder 250/250C:

**Included mounting hardware**—Four 3mm studs, four flat washers, and eight 3mm hex nuts.

**Tools (not included)**—Center punch, drill, 1/8" (3mm) drill bit, 3/8" (6mm) drill bit, jig saw, 1/16" (2mm) Allen wrench, and 9/32" (7mm) wrench.

1. Trim the Flush Mount Template and tape it in the appropriate location.
2. Using a center punch, indent the center of each mounting hole location.
3. Using a 1/8" (3mm) drill bit, drill the four mounting holes.
4. Using a 3/8" (6mm) drill bit, drill a hole for a location to begin cutting the mounting surface.
5. Using the jig saw, cut the mounting surface along the inside of the dashed line indicated on the template.



**NOTE:** Be very careful when cutting this hole; there is only a small amount of clearance between the unit and the mounting holes. It may be prudent to cut slightly inside the indicated line and then sand or file the panel as needed to obtain the best fit.

6. Install the four mounting studs into the unit by screwing the shorter section into the back of the unit. Use a 1/16" (2mm) Allen wrench to tighten the mounting studs until the stops contact the case. Be careful not to overtighten, as this may damage the mounting stud. The studs have a reusable thread-locking patch pre-applied from the factory.
7. Place the unit in position inside the cutout area of the mounting surface.
8. Place washers over the mounting studs, then thread on one hex nut per mounting stud. Tighten all four hex nuts until the unit is snug against the mounting surface. Install and tighten the second hex nut on all four mounting studs to lock the first hex nut in place.



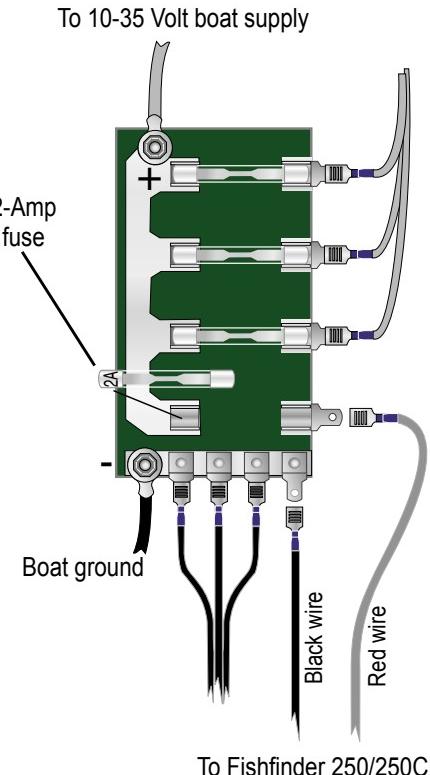
## Connecting the Power/Data Cable

The power/data cable connects the Fishfinder 250/250C to a 10-35 Volt DC system and provides interface capabilities for connecting external devices. The color code in the diagram (page 9) indicates the appropriate harness connections. If it is necessary to extend the power/data wires, use a wire of comparable size and keep your extension as short as possible.

The unit can be wired directly to your boat's battery or to an unused holder on your boat's fuse block. When connecting the unit directly to the battery, make sure the 2-Amp in-line fuse supplied with the unit is installed. If needed, use a 2-Amp ACG/3AG replacement fuse. If you decide to route power through the boat's fuse block, remove the in-line fuse holder on the unit's power/data cable.

### To connect the power/data cable to a voltage source:

1. Determine the polarity of the voltage source using a test light or voltmeter.
2. Connect the Red (+ or positive) wire to the positive voltage terminal. (If using the boat's fuse block, route the positive connection through the fuse, as shown on the diagram.)
3. Connect the Black (- or ground) wire to the negative voltage terminal.
4. Install or check the 2-Amp fuse (either on the boat's fuse block or in the in-line holder).



The Fishfinder 250/250C can be connected to another piece of NMEA compatible electronic equipment, such as a Garmin GPS (Global Positioning System). If equipped with a capable transducer, the Fishfinder 250/250C can send depth, temperature, and speed information to the NMEA device. It can also mark a location (page 20) that could be displayed on another device and can accept GPS navigational data (page 23), such as position, time, course, distance, etc. Refer to the wiring diagram on the following page for interfacing the Fishfinder 250/250C with other devices.

### To connect the power/data cable to a GPS or other NMEA device:

1. Follow steps 1-4 of the voltage source installation (page 7). For Garmin units, the ground (Black) wires serve as data ground and must be attached together or on the same terminal. Refer to the wiring diagram of your GPS unit for wire identification.
2. Connect the Blue (Data OUT) wire from the Fishfinder to the Data IN wire on the GPS/NMEA harness.
3. Connect the Brown (Data IN) wire from the Fishfinder to the Data OUT wire on the GPS/NMEA harness.
4. Set the Fishfinder 250/250C **NMEA Input/Output** to **On** (page 27). For Garmin GPS units, set the communications interface to NMEA/NMEA, NMEA In/NMEA Out, or NMEA.

### Interfacing

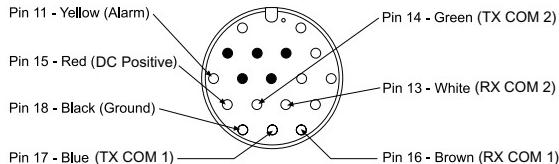
The Fishfinder 250/250C allows for NMEA 0183, Version 2.3 input/output with a compatible GPS or navigation device. **NMEA Input/Output** must be set to **On** to send/receive data (page 27). For additional information on using your Fishfinder 250/250C with NMEA devices, see pages 20 and 27.

The following sentences are for NMEA 0183, Version 2.3:

**Input**—GPBOD, GPBWC (only used if RMB not present), GPGGA, GPGLL (only used if GGA not present), GPRMB, GPRMC, GPXTE (only used if RMB not present)

**Output**—SDDBT, SDDPT, SDMTW, SDVHW, SDWPL\* (only if a waypoint is “marked” in Pointer mode)

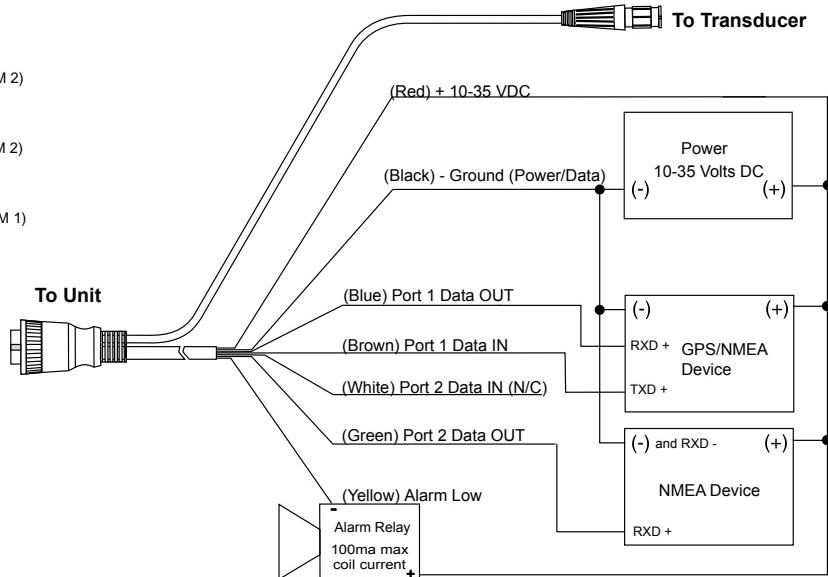
\*Garmin GPS units will accept an SDWPL (WPL) NMEA sentence and create a waypoint (saved location) at that position (page 20). For compatibility with other brands of GPS or NMEA capable navigation devices, check with those manufacturers to see if their units accept/store NMEA 0183 SDWPL sentences/waypoints. The Fishfinder 250/250C does not store the actual waypoint. Only the receiving device, if capable, will store the waypoint.



During a typical installation, only the Red and Black wires are used. The other wires do not have to be connected for normal operation of the unit.

Complete information concerning National Marine Electronics Association (NMEA) format and sentences is available for purchase from NMEA at:

NMEA  
Seven Riggs Avenue  
Severna Park, MD 21146 U.S.A.  
[www.nmea.org](http://www.nmea.org)



You can download a copy of Garmin's proprietary communication protocol document from the Support section of our Web site at [www.garmin.com](http://www.garmin.com).

## Installing the Transducer

Proper transducer installation is key to getting the best performance from your new unit. If the transducer lead is too short, extension cables are available from your Garmin dealer. Coil and secure any excess cable. **DO NOT** cut the transducer lead or any part of the transducer cable, as this will void your warranty. The cable cannot be spliced and connected to any existing (Garmin or non-Garmin) transducer cables.

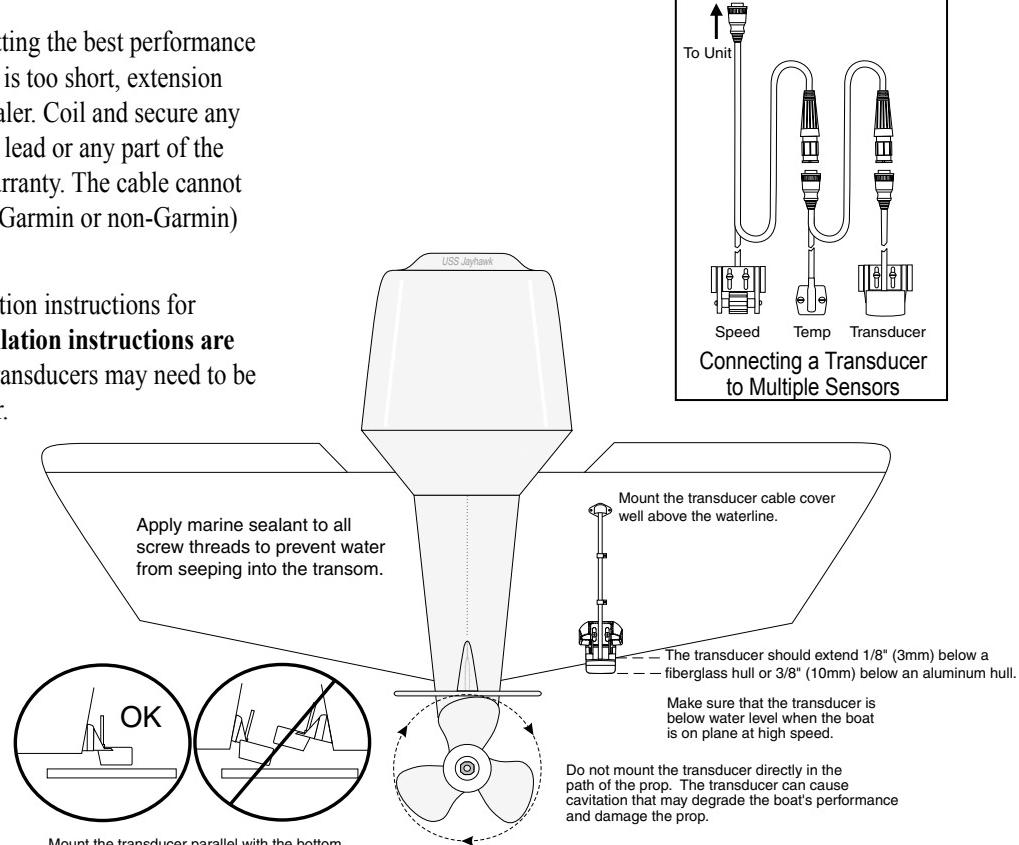
Following are some tips and basic installation instructions for some popular transducers. **Detailed installation instructions are provided in the transducer kits.** Some transducers may need to be installed by a professional marine installer.

### Transom Mount Installation

Transom Mount Transducer (depth/temp)



**NOTE:** DO NOT mount the transducer behind strakes, struts, fittings, water intake or discharge ports, or anything that creates air bubbles or causes the water to become turbulent. It is important that the transducer be in clean (non-turbulent) water for optimal performance.



## Shoot-Thru-Hull Installation

To avoid drilling a hole to mount a thru-hull transducer, a transducer may be secured with epoxy inside a boat (“shoot-thru-hull” installation). This type of installation can reduce noise and allow you to use a higher gain setting. For a transducer to be mounted inside the hull (shoot-thru, not thru-hull), the boat must be fiberglass, with no core. If you are unsure of your boat type, contact the manufacturer. Professional installation may be necessary. Always wear a dust mask and safety goggles when installing.

Some transducers are specifically designed to be mounted inside a fiberglass hull. The standard plastic transom mount transducer can also be mounted in this fashion using the following method. If using a temperature sensing transducer, the temperature displayed reflects the hull temperature.

When choosing a location for the transducer, consider the following conditions:

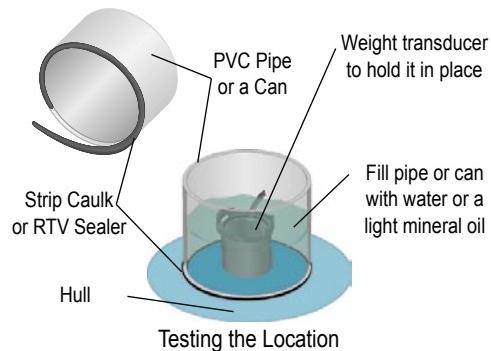
- The location has to be solid fiberglass, devoid of any air bubbles, laminates, fillers, or dead air space.
- The location needs to be in an area of clean water at all speeds.
- The location must not be over any strakes or behind any obstruction on the hull that would create turbulence at speed.



**NOTE:** Many modern hulls have a prelocated pocket for shoot-thru-hull transducer installation. If you are unsure if your hull is equipped with a pre-located pocket, contact your hull manufacturer.

### To test the location:

1. Fabricate a test device from a section of PVC pipe or a can, as shown below.
2. Temporarily seal the test device to the hull with caulking or RTV sealer, and fill with water or light mineral oil.
3. Place the transducer in the liquid, pointed directly at the bottom. Weight it down. Set the unit for optimum performance. If the sonar performance is significantly degraded, find and test another location.



**To permanently install the transducer:**

1. Lightly sand the surface of the hull and face of the transducer with 400-grit wet or dry sandpaper.
2. Build a dam using strip caulk about 1/4" (6mm) tall. Pour about 1/8" (3mm) of two part, slow cure epoxy in the dam.
3. Place the transducer in the epoxy, turning the transducer to work out any air bubbles.
4. Weight the transducer in place and allow to cure for 24 hours.

**Testing the Installation**

Though it is possible to perform some checks with the boat trailered, the boat should be in the water to properly test the sonar installation.

Press the **POWER/BACKLIGHT** key (page 13) and the Fishfinder 250/250C should power on. If the unit fails to power on, verify that the power/data cable is seated properly in the back of the unit, the Red and Black wires are connected to the correct polarity, and the 2-Amp fuse is installed and not blown. If the unit is connected to a power supply that exceeds 35 Volts DC, a “Battery Voltage High” warning is displayed and the unit turns off. If the unit does not detect a transducer, it automatically enters Simulator mode.

When the unit detects a transducer on initial power up, a “Please set up transducer” message is displayed. Press the **ENTER** key (page 13) to select the transducer type. Highlight your transducer type with the **ARROW** keys and press **ENTER**. Press **ADJ/MENU** to return to the Sonar display.

Since water is necessary to carry the sounder’s sonar signal, the transducer must be in the water to work properly. It is not possible to get a depth/distance reading when out of the water. As the unit powers on, it should immediately start showing the bottom. Verify that the unit is not in the Simulator mode. If the unit is in the Simulator mode, make sure that the transducer is connected properly to the unit. When you place your boat in the water, CHECK FOR LEAKS around any screw holes that have been added below the water line. DO NOT leave your boat in the water for an extended period of time without checking for leaks.

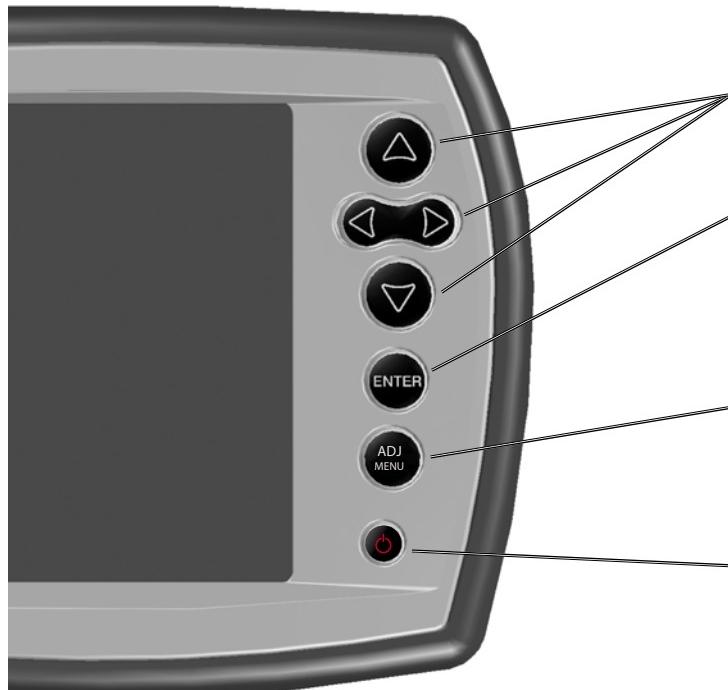
Begin testing the installation at a slow speed. If the sonar appears to be working properly, gradually increase the boat’s speed while observing the sonar’s operation. If the sonar signal suddenly is lost or the bottom return is severely degraded, note the speed at which this occurs. Return the boat to the speed the signal was lost. Make moderate turns in both directions and see if the signal improves. If the signal strength improves while turning, adjust the transducer so that it extends another 1/8" (3mm) below the transom of the boat. It may take several adjustments to eliminate the degradation. If the signal does not improve, it may be necessary to move the transducer to a different location.



**NOTE:** When adjusting the depth of the transducer, make the adjustments in small increments. Placing the transducer too deep can adversely affect the boat’s performance and put the transducer at greater risk of striking underwater objects.

## BASIC OPERATION

### Using the Keypad



**NOTE:** Press and release a key to activate its primary function. Pressing and holding a key activates its secondary function (if available).

The keypad contains the following keys:

**ARROW Keys**—press to select (highlight) menu options and enter data. Press to control movement of the cursor when paused in Pointer mode. Allows direct control of Sonar page adjustments.

**ENTER Key**—press to select a highlighted menu option. When entering data, allows you to initiate entry and then accept the selected value(s). When paused in Pointer mode, press to create a waypoint at the Pointer position (if interfaced with compatible NMEA GPS).

**ADJ/MENU Key**—from the Sonar screen, press and release to display the Adjustment Menu. Press and hold to access the Main Menu for unit configuration. From either menu, press and release to return to the Sonar page.

**POWER/BACKLIGHT Key**—press and hold to turn the unit on and off. While the unit is on, press and release to display the light/contrast adjustment window. See page 14 for more information.

## Using the Sonar Page

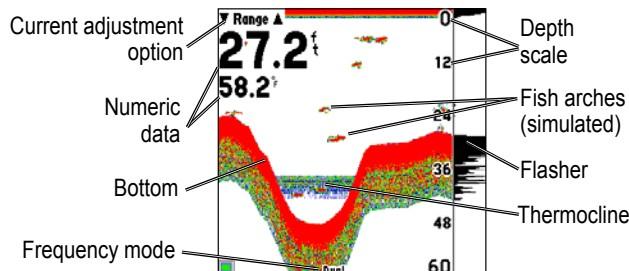
The Sonar page is where your Fishfinder 250/250C becomes a powerful fishfinder/flasher. If the unit does not detect a transducer, a “Sonar Turned Off” message is displayed on the Sonar page. If in Simulator mode, a “Running Simulator” message appears.

You can adjust the unit’s backlight and contrast settings to improve screen readability.

### To change the backlight/contrast settings:

1. Press and release **POWER/BACKLIGHT** to display the light/contrast adjustment window. The adjustment window automatically disappears when idle for 20 seconds.
2. Press the Up or Down **ARROW** keys to change the backlight setting. Press and release **POWER/BACKLIGHT** to toggle the backlight setting between maximum, user-set, and minimum brightness levels.
3. Press the Left or Right **ARROW** keys to change the contrast setting.
4. Press **ENTER** to return to the Sonar page.

The currently selected adjustment option (page 17) is displayed in the top left of the screen. Directly below the adjustment option, the screen displays numeric data such as **Depth**, **Water Temperature** and **Water Speed** (pages 23-24). The middle of the page contains a right-to-left moving sonar image of the water beneath your boat. Items appear as they pass under your transducer. Items on the right side of the screen are closer to you than those on the left. Along the right side of the screen is a scale that reflects the depth of the area being displayed.

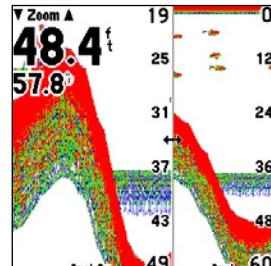


The display may also be set to show a split screen view of a zoomed portion of the sonar, bottom lock (display scaled from the bottom up), or a combination of these options (pages 17-18). For example, you may choose to show dual frequency at a 2x zoom (**Dual 2x**) on one half of the screen, with normal range dual frequency (**Dual**) on the other half. The current display mode is shown at the bottom of each sonar display.

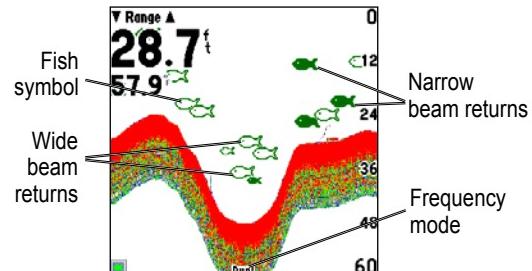
The Fishfinder 250 displays sonar returns as shades of gray; stronger returns are darker, and weaker returns are lighter. On the Fishfinder 250C, sonar returns are displayed as red (strongest), orange (strong), yellow (medium), green (weaker), and blue (weakest).

The **Fish Symbols** option (page 22) allows you to find fish by viewing the actual sonar data, a fish symbol or a combination of both. Fish symbols appear as black on the Fishfinder 250 and green on the Fishfinder 250C. When **Frequency** is set to **Dual** (page 14), the appearance of the fish symbols (and simulated fish returns) will change. Fish symbols from the narrower beam (**200kHz**) will be solid (narrow returns), but the returns from the wider beam (**50kHz**) will be hollow (wide returns). Simulated fish icons are displayed in three different sizes based on the size of the return. Actual fish returns may not always appear as perfect arches, due to the speed, fish orientation, and/or other conditions.

For more information on understanding the sonar, see pages 31-33.



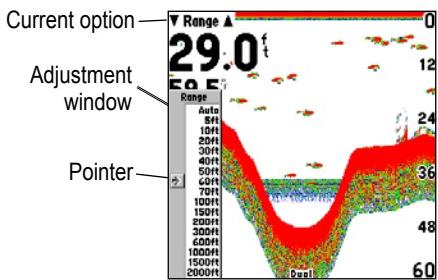
Split screen view



Fish symbols

## Using the Adjustment Menu

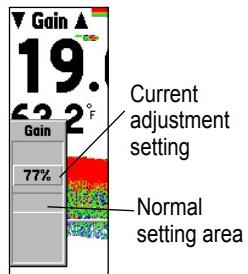
The Adjustment Menu allows direct access to the settings and features most commonly used on the Sonar page. There are 10 main adjustment options available: **Range**, **Zoom**, **View**, **Gain**, **Target Level**, **Whiteline**, **Frequency**, **Depth Line**, **Noise Reject**, and **Scroll**. All adjustments may be made by using the **ARROW** keys and **ENTER** key. The currently selected option will appear in the upper left of the display with up and down arrows on either side of the name.



### To change an Adjustment Menu setting:

1. Press **ADJ/MENU** to display a list of all options and their current settings. The adjustment window automatically disappears when idle for 20 seconds, or you may press **ADJ/MENU** to exit.

2. Press the Up or Down **ARROW** keys to highlight the desired option and press **ENTER** to display the adjustment window.
3. Press the Up or Down **ARROW** keys to move the setting bar (or pointer) to the desired percentage (**Off**, **1-100%**), setting, or range. When changing most adjustment settings, an open space is displayed on the scale to indicate the **Normal** or default setting. Once set to **Normal**, the setting bar is replaced by the word **Normal**.



4. Press **ENTER** to accept the new setting and return to the Sonar page.

The current adjustment option is displayed in the upper left corner of the screen. For fast adjustment from the Sonar page, press the Left or Right **ARROW** keys to scroll through the options. Press the Up or Down **ARROW** keys to change the current setting or press the **ENTER** key to review the setting before making changes.

## Adjustment Options



Adjustment Menu

The following adjustments can be made from the Adjustment Menu:

- Range**—sets the display depth range used for viewing. The unit can be set to automatically track the bottom or set to a user-specified depth range (see “Custom Range” on page 22).
- Zoom**—quickly selects a display zoom scale or to split the display. When a scale other than **No Zoom** is selected, the **View** or **Span** options are activated in the Adjustment Menu.

The Zoom function includes the following seven settings:

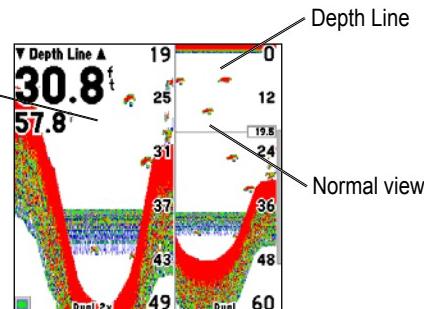
**No Zoom**—displays the sonar picture with no zoom.

**2x Split**—shows two reduced-size sonar pictures at the same time. The right half of the display screen shows the complete sonar picture at its original scale. The left half shows a portion of the original picture at 1/2 depth scale.

**2x Zoom**—displays the 2x zoomed picture on the full screen and does not show the original scale picture.

**4x Split**—shows two reduced pictures, the right at the original depth scale and the left at 1/4 the original depth scale.

**4x Zoom**—displays only the 4x zoomed picture on the full screen.



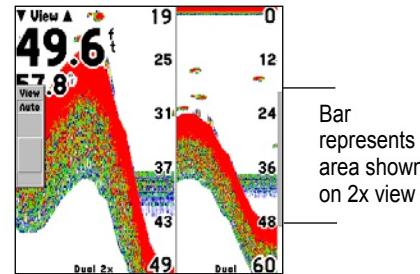
Sonar 2x split screen (shown with Depth Line)

**Btm (Bottom) Split**—shows two reduced pictures, the right at the original depth scale and the left showing only sonar returns close to the bottom. The bottom is displayed as a flat line across the bottom of the screen, and returns are shown at their distance from the bottom. You can adjust the scale of the **Bottom Split** display by changing the **Span** setting (see below).

**Btm (Bottom) Lock**—displays the **Bottom Lock** (returns close to the bottom, shown at their distance from the bottom) picture on the full screen. You can adjust the scale of the **Bottom Lock** display by changing the **Span** setting (see below).

- **View/Span**—available when a **Zoom** scale other than **No Zoom** is selected. The **View** or **Span** settings are used to change the viewing range of a zoomed display. The **View** option is enabled when the display is set to **2x Split**, **2x Zoom**, **4x Split**, or **4x Zoom**. If the display is 2x or 4x split, only the zoomed portion on the left side of the display is affected by the change. If the display is **Bottom Split** or **Bottom Lock**, the **Span** option adjusts the area from the bottom for which the unit displays data.
- **Gain**—controls the sensitivity of the unit's receiver. This provides some flexibility in what is seen on the display. To see more detail, increase the receiver sensitivity by selecting

a higher gain percentage. If there is too much detail or if the screen is cluttered, lowering the sensitivity may increase the clarity of the display.



Sonar view adjustment

- **Target Level**—adjusts which colors (Fishfinder 250C) or shades of gray (Fishfinder 250) are used to display sonar information. A **Color Bar** (page 23) is displayed on the right side of the screen as you adjust this setting. A higher percentage results in more strong-signaled colors or shades (page 15) displayed on the Sonar page. A lower percentage results in more weaker-signaled colors or shades (page 15) displayed on the Sonar page. This setting does not increase/decrease the unit **Gain**.
- **Whiteline**—controls how the unit displays information about the bottom type (hard or soft). When turned **Off**, all high-intensity bottom returns are displayed as red on the Fishfinder

250C and black on the Fishfinder 250. When set at **Normal** or **1-100%**, this option can be used to better determine bottom hardness. See page 34 for more information on this feature.

- **Frequency**—allows you to choose a sonar operation frequency. The frequency is the “pitch” of the sound that the transducer sends and receives. You may choose **200kHz**, **50kHz**, or **Dual** frequency (when using a dual frequency transducer).
- **Depth Line**—adds a horizontal depth line across the display to measure the depth of underwater objects. The depth of the line is displayed in a box on the right side of the line. When the **Depth Line** adjustment window is visible, press the Up or Down **ARROW** keys to control the position of the line on the graph.
- **Noise Reject**—helps filter unwanted noise from the graph. This option can be turned **Off**, set to **Normal** (automatically adjusts for optimum viewing), or set to a fixed **1-100%** setting. Higher noise rejection settings make the unit less likely to show fish or structures.
- **Scroll**—adjusts the rate that the graph scrolls from right to left. If you are sitting still or the graph is moving too fast, slowing the scroll rate or pausing it can be beneficial. **Auto** automatically adjusts the scroll rate according to the boat’s speed. (See also “Automatic Scroll Speed Limit” on page 29.)

- **Size Split**—enables width adjustment of the Sonar page split screen. This option is only available when a split zoom is selected. You may adjust the size of the split window anywhere from 1/4 to 3/4 width from the right half of the Sonar page.
- **Defaults**—restores adjustment options back to original factory settings.

### To resize the Sonar page split screen:

1. From the Sonar page split screen, press **ADJ/MENU**.
2. Using the **ARROW** keys, highlight the **Size Split** option and press **ENTER**. A small double-arrow is displayed in the middle of the split line on the screen.
3. Press the Left or Right **ARROW** keys to move the split line. Press **ENTER** when the line reaches a suitable location.

